

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Withdrawn) A methanol reforming catalyst, comprising:

a metal oxide support; and

Pd-Zn alloy that is impregnated in the metal oxide support.
2. (Withdrawn) The methanol reforming catalyst according to claim 1, wherein the metal oxide contains Ce oxide or Zr oxide.
3. (Withdrawn) The methanol reforming catalyst according to claim 1, wherein the metal oxide contains Ce-Zr complex oxide.
4. (Withdrawn) The methanol reforming catalyst according to claim 1, wherein a weight ratio of Pd and Zn in the Pd-Zn alloy is 1:1 to 1:50.
5. (Withdrawn) A methanol reforming catalyst, comprising:

at least one type catalyst component selected from the group consisting of Pd-Zn-Ce based compound, Pd-Zn-Zr based compound, and Pd-Zn-Ce-Zr based compound.
6. (Currently Amended) A method of producing a methanol reforming catalyst, comprising:

~~preparing a metal oxide support using powder selected from the group consisting of Ce oxide powder, Zr oxide powder and Ce-Zr complex oxide powder to provide the support consisting essentially of a material selected from the group consisting of Ce oxide, Zr oxide and Ce-Zr complex oxide;~~

impregnating the metal oxide support with Pd and Zn; and
burning the metal oxide support that is impregnated with Pd and Zn.
- 7 - 8. (Canceled)
9. (Currently Amended) A method of producing a methanol reforming catalyst, comprising: preparing a metal oxide support using powder selected from the group consisting of Ce oxide powder, Zr oxide powder and Ce-Zr complex oxide powder to provide the support consisting

essentially of a material selected from the group consisting of Ce oxide, Zr oxide and Ce-Zr complex oxide;

impregnating the metal oxide support with Pd and Zn; and

burning the metal oxide support that is impregnated with Pd and Zn.

~~The method according to claim 6~~, wherein the impregnating step first impregnates the metal oxide support with a Zn-containing solution and then impregnates the metal oxide support with a Pd-containing solution.

10. (Previously Presented) The method according to claim 6, wherein a burning temperature used in the burning step is 400 to 600° C.

11. (Original) The method of claim 10, further comprising:

reducing the metal oxide at 400 to 600° C.

12. (Withdrawn) A methanol reformer, comprising:

an inlet port of a gas;

a reaction vessel having the methanol reforming catalyst set forth in claim 1 in its inside and causing a reforming reaction of a gas supplied from the gas inlet port; and

an outlet port of the gas reformed in the reaction vessel.

13. (Withdrawn) A methanol reformer, comprising:

an inlet port of a gas;

a reaction vessel having the methanol reforming catalyst set forth in claim 5 in its inside and causing a reforming reaction of a gas supplied from the gas inlet port; and

an outlet port of the gas reformed in the reaction vessel.

14. (Withdrawn) A methanol reforming apparatus, comprising:

the methanol reformer set forth in claim 12;

a methanol supply source;

an oxygen supply source;

a steam supply source; and

a pipe supplying methanol, oxygen, and steam, which are supplied from respective, supply sources, to the methanol reformer.

15. (Withdrawn) A methanol reforming apparatus, comprising:

the methanol reformer set forth in claim 13;

a methanol supply source;

an oxygen supply source;

a steam supply source; and

a pipe supplying methanol, oxygen, and steam, which are supplied from respective, supply sources, to the methanol reformer.

16. (Withdrawn) A fuel cell system, comprising:

the methanol reforming apparatus set forth in claim 14;

a fuel cell;

a pipe supplying a gas reformed by the methanol reforming apparatus to the fuel cell; and

a pipe supplying an oxygen-containing gas to the fuel cell.

17. (Withdrawn) A fuel cell system, comprising:

the methanol reforming apparatus set forth in claim 15;

a fuel cell;

a pipe supplying a gas reformed by the methanol reforming apparatus to the fuel cell; and

a pipe supplying an oxygen-containing gas to the fuel cell.

18 - 20. (Canceled)

21. (Currently Amended) The method of claim 6, further comprising:

forming a slurry including the metal oxide ~~powder~~ support; and
coating the slurry on a monolithic substrate.

22. (Previously Presented) The method of claim 21, further comprising:
burning the slurry coated monolithic substrate.

23. (Previously Presented) The method of claim 22, wherein the burning temperature used in the burning the slurry coated monolithic substrate is about 400 °C.

24. (Currently Amended) The method of claim 21, wherein the forming a slurry further comprises:

mixing the metal oxide support impregnated with Pd and Zn with nitric acid containing one of alumina and silica.

25. (New) The method according to claim 9, wherein a burning temperature used in the burning step is 400 to 600°C.

26. (New) The method of claim 25, further comprising:
reducing the metal oxide at 400 to 600°C.

27. (New) The method of claim 9, further comprising:

forming a slurry including the metal oxide support coating the slurry on a monolithic substrate.

28. (New) The method of claim 27, further comprising:
burning the slurry coated monolithic substrate.

29. (New) The method of claim 28, wherein the burning temperature used in the burning the slurry coated monolithic substrate is about 400°C.

30. (New) The method of claim 27, wherein the forming a slurry further comprises:

mixing the metal oxide support impregnated with Pd and Zn with nitric acid containing one of the alumina and silica.